D.T.E. 98-100

Investigation by the Department of Telecommunications and Energy on its own motion to Establish Methods and Procedures to Evaluate and Approve Energy Efficiency Programs, pursuant to G.L. c. 25, § 19 and c. 25A, § 11G.

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ORDER INSTITUTING A NOTICE OF INQUIRY/GENERIC PROCEEDING

TO ESTABLISH METHODS AND PROCEDURES TO EVALUATE

AND APPROVE ENERGY EFFICIENCY PROGRAMS

I. INTRODUCTION

In this Order,[(1)] the Department of Telecommunications and Energy ("Department") solicits comments regarding the methods and procedures that we will use to evaluate energy efficiency[(2)] programs implemented by electric distribution companies ("electric companies") and natural gas local distribution companies ("gas companies"). G.L. c. 25, § 19[(3)] directs the Department to "require a mandatory charge per kilowatt-hour[(4)] for all consumers of the commonwealth ... to fund energy efficiency activities, including, but not limited to, demand-side management programs." In addition, G.L. c. 25, § 19 requires the Department ensure that the programs funded by this mandatory charge are delivered in a cost-effective manner using competitive procurement processes to the fullest extent practicable. Accordingly, the objectives of this proceeding are to establish a uniform cost-effectiveness test (or tests) and set of administrative procedures that the Department will employ to evaluate and approve electric and gas company energy efficiency programs.[(5)]

Furthermore, we seek comments on the monitoring and evaluation ("M&E") activities that electric and gas companies should undertake to determine savings estimates from the implementation of energy efficiency programs. Finally, the Department intends to investigate issues associated with shareholder incentives included in companies' energy efficiency plans.

II. BACKGROUND

The Department's precedent regarding the cost-effective implementation of energy efficiency programs is well established. The Department historically has required that companies implement such programs only when the value of a program's benefits exceeds the program's costs (i.e., if the program's benefits-cost ratio is greater than 1.0). New Electric Generation Qualifying Facilities, D.P.U. 86-36-F at 7 (1988). Further, the Department has stated that only those measures that are cost-effective should be included in an energy efficiency program. Massachusetts Electric Company, D.P.U. 89-194/195, at 114 (1990).

The Department is initiating this proceeding due to four developments. First, the restructuring of the electric and gas industries has resulted in the unbundling of services that electric and gas companies provide to their customers. In particular, electric companies no longer are solely responsible for providing generation service to customers; this may apply equally to gas companies in the near future. See Natural Gas Industry Restructuring, D.T.E. 98-32 (1998). This development requires the Department to re-evaluate the manner in which the benefits associated with avoided generation and gas

supply costs resulting from implementation of energy efficiency programs are accounted for in assessing program cost effectiveness. Second, the energy efficiency charges specified by the Restructuring Act establish the energy efficiency funding levels for each electric company. The Department's objective in evaluating the cost-effectiveness of energy efficiency programs will be to ensure that the legislatively-mandated funds are expended in a manner that provides substantial benefits to electricity customers in Massachusetts. Third, the development of programs that are designed and implemented on a regional basis may merit a different approach to determining cost-effectiveness. Finally, G.L. c. 25, § 19 and c. 25A, § 11G establish certain roles for the Division of Energy Resources ("DOER") and the Department with respect to the implementation of energy efficiency programs.[(6)] The Department intends to use this proceeding, in conjunction with our participation in the ongoing DOER proceeding,[(7)] to ensure that the respective roles of the two agencies are fulfilled in a coordinated manner. The Department concludes that, in light of these developments, it is appropriate and necessary to re-evaluate and to revise our established energy efficiency program review process.

III. DESCRIPTION OF THIS PROCEEDING

A. Issues to be Addressed

The Department intends to address four broad issues: (1) the process by which the Department will review energy efficiency programs pursuant to G.L. c. 25, § 19 and c. 25A, § 11G ; (2) the criteria the Department will employ to determine whether a proposed energy efficiency program is cost-effective; (3) the monitoring and evaluation of savings that result from implementation of energy efficiency programs in order to determine program cost-effectiveness; and (4) the shareholder incentives that are included in electric and gas companies' energy efficiency plans. Section IV, below, includes a set of questions associated with each broad issue identified above.

In addressing these issues, we will distinguish, as appropriate, among three types of energy efficiency programs: (1) retrofit and lost opportunity programs that historically have been designed and implemented by the electric and gas companies on a company-specific basis and that are targeted at individual homes and businesses ("traditional programs") ; (2) newly-developed programs that are jointly designed and implemented by electric and gas companies in the Northeast region, for which the primary goal is to transform the behavior of market participants in a manner that leads to lasting increases in the use of energy efficient measures and practices ("market transformation programs"); and (3) programs that are targeted at low-income customers ("low-income programs").

B. Procedural Schedule

The Department intends to complete this proceeding in a timeframe that will allow companies to use the guidelines established here in the development of energy efficiency programs to be implemented in the year 2000. As such, the Department adopts the following procedural schedule. A procedural conference will be held on January 26, 1999. Immediately following that procedural conference, there will be a technical session

to discuss the issues and questions relevant to the electric companies outlined herein. A second technical session addressing the issues and questions relevant to the gas companies will be held on January 28, 1999. The purpose of these technical sessions will be to (1) identify whether the issues and questions listed by the Department are appropriate, (2) identify whether additional issues should be addressed in this proceeding, (3) identify those issues on which it appears there is broad agreement, and (4) determine whether future technical sessions on these issues would be useful. March 12, 1999 shall be the deadline for comments on the questions and issues identified in this Order and any additional matters identified during the technical sessions. Based on input from the technical sessions and comments filed, the Department intends to publish for comment draft guidelines regarding the methods and procedures we will use to evaluate energy efficiency programs. The Department encourages the filing of joint comments prior to the development of our guidelines.

IV. ISSUES AND QUESTIONS

A. The Process by Which the Department Will Evaluate the Cost-Effectiveness of Proposed Energy Efficiency Programs

1. Introduction

Historically, the Department has reviewed and evaluated the cost-effectiveness of energy efficiency programs on a company-specific basis (i.e., the benefits and costs associated with each program were determined using company-specific data, based on the programs implemented by each company). This approach reflected the fact that electric and gas companies designed and implemented their programs individually.

However, as discussed above, some of the new market transformation programs currently being developed are jointly designed and implemented by electric and gas companies in the Northeast. In addition, G.L. c. 25, § 19 states that low-income programs "shall be implemented through the low-income weatherization and fuel assistance program network and shall be coordinated with all gas and distribution companies in the commonwealth with the objective of standard implementation." Therefore, in this proceeding, the Department intends to investigate whether it is appropriate for the Department to revise its policy of reviewing and evaluating each electric and gas company's portfolio of energy efficiency programs on a company-specific basis, particularly for those programs for which design and implementation are of a statewide or regional nature.

2. Questions

1. Is there any reason for the Department to change its policy of reviewing and evaluating the cost-effectiveness of each electric and gas company's traditional DSM programs on a company-specific basis?

2. Should the Department review and evaluate the cost-effectiveness of regionally-implemented market transformation programs on (a) a regional basis (i.e., using regional projections of benefits and costs); (b) a statewide basis (i.e. using statewide projections of benefits and costs); or (c) a company-specific basis? Should such a method of review and evaluation apply generically for all market transformation programs or on a program-specific basis? If cost-effectiveness is evaluated on a regional basis, how should the appropriate region for a program be determined? How would benefits to Massachusetts ratepayers be assessed?

3. Should the Department review and evaluate the cost-effectiveness of statewide low-income programs on (a) a statewide basis (i.e. using statewide projections of benefits and costs); or (b) a company-specific basis?

4. If the Department were to review and evaluate jointly implemented programs on a

regional or statewide basis, would this obviate the need to review these programs separately as part of each company's cost-effectiveness proceeding?

B. Cost-Effectiveness Test Criteria

1. Introduction

Determining the cost-effectiveness of an energy efficiency program typically has involved the following process:

(1) Energy and capacity savings resulting from implementation of a program in a particular year are determined. Savings initially are estimated on a prospective basis, based on projections of the energy efficiency measures to be installed. Final savings estimates are determined retrospectively, after the measures have been installed, based on the company's monitoring and evaluation results.

(2) The savings are multiplied by avoided cost factors for electric generation (for electric companies) or gas commodity (for gas companies), transmission, and distribution to establish the costs that are avoided by implementation of the program.

(3) Other benefits from implementation of the program are determined, as appropriate. These benefits are added to the avoided costs to calculate the program's total benefits.

(4) Costs associated with the implementation of the program are determined.

(5) The present value of benefits and costs are divided to produce the program's benefit/cost ratio. A benefit/cost ratio greater than one indicates a program's cost-effectiveness.

2. Types of Cost-effectiveness Tests

a. Introduction

There are three broad categories of tests that historically have been used by electric and gas companies to demonstrate program cost-effectiveness: (1) the Utility Cost Test; (2) the Total Resource Cost Test; and (3) the Societal Test. Table I, included in Attachment I to this Order, illustrates the various elements for benefits and costs that are incorporated into the different tests. The Utility Cost Test assesses the cost-effectiveness of a program by valuing the net economic impact of implementation of a program on an electric or gas company's system. This utility perspective has been used to determine the value of avoided electric generation or gas supply, transmission, and distribution costs on a

utility's system. Customer costs and benefits not directly related to electric or gas consumption are not included in this type of test. The Total Resource Cost Test assesses program cost-effectiveness from a broader perspective than the Utility Cost Test in that the Total Resource Cost Test values the net impact of all direct economic costs and benefits of a program, rather than valuing only those elements that affect an electric or gas company's system. As such, the Total Resource Cost Test includes customer costs and certain "other benefits"[(8)] that are not directly related to electric or gas consumption. Finally, the Societal Test assesses the extent to which society, as a whole, will be affected by implementation of a program. As such, values are given to all elements that are reasonably considered to affect society.

In this proceeding, the Department intends to investigate which test(s) is (are) appropriate to use in evaluating the cost-effectiveness of electric and gas energy efficiency programs.

b. Questions

5. Are there tests other than the Utility Cost Test, the Total Resource Cost Test and the Societal Test that the Department should consider using to evaluate program cost-effectiveness?

6. Does the fact that the Restructuring Act establishes a charge per kilowatt-hour collected for energy efficiency programs have any influence on the choice of a cost-effectiveness test? Why?

7. Should the Department select a single cost-effectiveness test to apply to all energy efficiency programs? If so, which test would be most appropriate to determine program cost-effectiveness? Alternatively, should different tests be used for different types of programs? Which ones? Should more than one test be used to evaluate the cost-effectiveness of a particular program?

3. Avoided Electric Generation and Gas Supply Costs

a. Introduction

Cost-effectiveness tests traditionally have included benefits based on the avoided electric generation (both energy and capacity) for each electric company's generation resource portfolio, and the avoided gas supply associated with each gas company's gas contract

portfolio. For electric companies, the introduction of retail choice in the electric industry and the divestiture of the companies' generation resources have required an adjustment to the manner in which avoided generation costs are calculated.[(9)]

In this proceeding, the Department intends to investigate how avoided generation and supply costs should be included in the tests used to evaluate the cost-effectiveness of electric and gas energy efficiency programs.

b. Questions

8. In light of the fact that electric generation is no longer a monopoly service provided by electric companies, is it still appropriate to include avoided generation costs in the evaluation of the cost-effectiveness of electric energy efficiency programs?

9. If generation costs are appropriately included in the evaluation of program cost-effectiveness, what value for avoided generation cost should be used in the short-term? Should the avoided costs developed by the DOER working group be used until a market price for electricity is established? Are these avoided costs a reasonable proxy for current market prices?

10. Once established, will the commodity markets administered by the Independent System Operator of New England provide appropriate values for market prices of generation? How often should market prices be updated to reflect current market conditions? Should different prices be used for traditional and market transformation programs, respectively?

11. Is it appropriate to use short-run market prices for generation to evaluate the long-term benefits associated with program implementation? Are there now, or will there be, long-term market price(s) that could be used for this purpose?

12. In light of the fact that the customers of gas companies may soon be able to choose the source of their gas supply, is it appropriate to continue to use company-specific avoided gas supply costs for traditional gas energy efficiency programs? What values for

avoided gas supply costs should be used for those energy efficiency programs that are jointly implemented by gas companies in Massachusetts?

4. Avoided Transmission and Distribution Costs

a. Introduction

Historically, avoided transmission and distribution ("T&D") costs have been estimated based on the costs associated with each electric and gas company's transmission and distribution infrastructure. This approach may continue to be appropriate for traditional energy efficiency programs, because transmission and distribution services will continue to be regulated in the restructured electric and gas industries. However, for the regional market transformation programs (and possibly low-income programs implemented on a statewide basis), it may be necessary to revise the manner in which avoided T&D costs are calculated. In this proceeding, the Department intends to investigate how avoided T&D costs should be included in the tests used to evaluate the cost-effectiveness of electric and gas energy efficiency programs.

b. Question

13. If the cost-effectiveness of regional market transformation programs is evaluated on a regional or statewide basis, what values for avoided T&D costs should be included? Is it appropriate to develop avoided T&D costs based on a weighted average of avoided costs of participating electric and gas companies? In what circumstances is it appropriate to use location-specific T&D avoided costs?

5. Other Benefits

a. Introduction

The implementation of energy efficiency programs may produce benefits that may not be captured in the avoided costs categories discussed above. Some of these benefits may be associated with savings of resources other than electricity and gas ("other resource benefits"). For example, the "High Efficiency Clothes Washer" program that is currently being jointly implemented by electric and gas companies in the Northeast region encourages the sale of clothes washers that use less water than traditional washers, thus producing reductions in water usage. Other resource benefits may be quantifiable because they are associated with the reduction in consumption of specified resources.

In addition, there are other benefits that are not captured in the avoided costs categories discussed above and that are not associated with a reduction in consumption of other resources ("non-resource benefits"). Non-resource benefits typically are associated with environmental, economic, comfort, productivity, and other effects. Because these benefits are not associated with a reduction in consumption of a particular resource, they may not be easily quantified. In this proceeding, the Department intends to investigate whether and how these other resource and

non-resource benefits should be included in the tests used to evaluate the cost-effectiveness of electric and gas energy efficiency programs.

b. Questions

14. If the Department determines that a cost-effectiveness test should include societal effects, how should benefits not associated with avoided electric or gas consumption be calculated? Is it appropriate to attempt to quantify those benefits for which there are demonstrated savings?

15. Should other resource benefits be quantified based on the avoided costs associated with these other resources? If so, should the avoided costs be determined on a regional, statewide, or company-specific basis? Should treatment of other resource benefits differ for traditional and market transformation programs?

16. What non-resource benefits should be considered in a cost-effectiveness test? Is it appropriate to attempt to quantify non-resource benefits? Which, if any, of these benefits lend themselves to this type of treatment?

17. In the absence of quantified values, how should non-resource benefits be included in a cost-effectiveness test?

6. Benefits Specific to Low-Income Programs

a. Introduction

Studies of low-income programs have identified benefits that are particular to low-income programs.[(10)] These benefits include, but are not limited to, the following: (1) reductions in late payments, collection costs, and bad debt write-offs; (2) improvements in housing maintenance, health, and nutrition as customers can afford to heat their homes properly; and (3) reduced dangers of fires and hazardous fumes from alternative sources of heat such as ovens and portable space heaters. In this proceeding, the Department intends to investigate whether and how other benefits particular to low-income programs should be included in the tests used to evaluate the cost-effectiveness of these programs.

b. Questions

18. What, if any, benefits are specific to energy efficiency programs targeted to low-income customers? How quantifiable are these benefits?

19. In the absence of quantified values, how should benefits specific to low-income programs be included in a cost-effectiveness test?

C. Monitoring and Evaluation of Energy Efficiency Savings

1. Introduction

The Department historically has required retrospective evaluations of energy efficiency program savings to determine whether a program has been implemented cost-effectively, and has established standards that require that (1) the energy efficiency monitoring and evaluation ("M&E") filings be reviewable, (2) the methods used to determine energy efficiency savings be appropriate, and (3) the savings estimates be sufficiently reliable (i.e., unbiased and sufficiently precise). Initially, the Department required companies to submit M&E filings annually. More recently, we have allowed those companies whose measured savings estimates have largely confirmed their initial savings estimates to submit M&E filings less frequently. See, e.g., Massachusetts Electric Company, D.P.U. 96-6-CC (1996).

In general, program savings have been estimated by measuring electric consumption for both program participants and non-participants; the difference between the two levels has been deemed to be the savings resulting from the implementation of the energy efficiency program. For traditional programs, the identification of program participants and non-participants was relatively simple because these programs were designed so that energy efficiency measures would be installed at the homes and businesses of participating customers. Those customers that did not participate, and had not previously participated, in a program typically were included in a control group that was used to develop a baseline level of activity that indicated what would have happened in the absence of program implementation.

Market transformation programs present new challenges with respect to the evaluation of program savings for the following reasons. First, it is not easy to identify participants and non-participants for these programs. Indeed, these programs are intended to produce savings among customers who do not directly participate in the program. Second, it may be difficult to identify a baseline level of activity of "what would have happened" absent the implementation of the program. The absence of a baseline may create difficulty in determining actual program savings. Third, savings from market transformation programs may occur over a longer period of time compared to traditional programs. For market transformation programs, the bulk of expected program benefits likely will result from measures installed in future years. Finally, it may be necessary to rely on "market indicators" as a proxy for program savings in the early years of program implementation. For these reasons, the reliability of savings estimates from market transformation may be hard to determine.

In this proceeding, the Department intends to investigate issues associated with the M&E of savings resulting from the implementation of energy efficiency programs.

2. Questions

20. Are any changes needed in the Department's standard that post-implementation evaluations of energy efficiency programs be reviewable, appropriate, and reliable? Should these standards apply equally to traditional, market transformation, and low-income programs? How often should these evaluations be performed for traditional programs? For market transformation programs? For low-income programs?

21. For both traditional and market transformation programs, what percentage of a company's or program's total budget should be devoted to evaluation?

22. How should baseline levels of savings of market transformation programs (i.e., projections of what would have happened absent a market transformation initiative) be initially determined? To what extent, and how, can these baseline projections be validated? Should these baseline levels be revisited and possibly revised? If so, how often?

23. What are the best ways to use scenario analysis in determining the cost-effectiveness of market transformation programs on a prospective basis?

24. What is the role of retrospective cost-effectiveness evaluations for market transformation programs, in light of the fact that many of the installations that produce savings for these programs are expected to occur in the future? What are the best ways to use scenario analysis in determining the cost-effectiveness of market transformation programs on a retrospective basis? How should retrospective analyses be used in deciding when to end intervention in a market?

25. What are appropriate methods for conducting market research to measure the effects of market transformation programs? Are these methods generic to all programs or program-specific? How should market share indicators be translated into capacity and energy savings estimates?

26. What benchmarks should be used for scenario testing in market research? What new and different screening methods can be used?

27. How can projections of what will happen in a market after a market transformation program ends be validated? To what extent should these projections be tracked?

28. Are there particular types of bias that exist in the determination of savings estimates for market transformation programs? Given the uncertainty of what would have happened absent a market transformation initiative, how much precision should be sought in measuring what actually did happen?

29. If necessary, how should savings and costs of a regional market transformation program be allocated among participating states and/or electric and gas companies?

30. How should the "DSM Annual Report" tables be revised to (a) better meet the needs of the energy efficiency participants in the restructured electric industry, (b) accommodate market transformation program information, and (c) better meet the information needs of DOER? What data in the tables are no longer necessary, given the cost of data collection?

D. Shareholder Incentives

1. Introduction

The Department has recently approved settlements for each of the electric companies, with the exception of Fitchburg Gas and Electric Light Company.[(11)] Each of the approved settlements includes a provision that allows the companies the ability to earn, for the years 1998 and 1999, a maximum shareholder incentive equal to 12.9 percent of total energy efficiency expenditures. The settlements state that this maximum incentive level also would apply to the years 2000 through 2002 unless such a level would be "inconsistent with any statute or regulatory decisions, orders or other mandates, if any, in effect for the years 2000-2002 that are generally applicable to Massachusetts electric distribution companies." The Department intends to investigate, as part of this proceeding, issues associated with shareholder incentives.

2. Questions

31. On what basis should maximum shareholder incentive levels be set? For example, should maximum levels be based on a company's cost-of-capital or some other financial indicator?

32. How is the appropriate level of shareholder incentives influenced by passage of the Restructuring Act?

33. What standard of review should the Department employ to approve a reasonable

shareholder incentive? Should this standard of review differ between electric companies and gas companies? How should this standard of review be altered for implementors of energy efficiency programs that do not have shareholders, such as municipal aggregators?

E. Other Cost-Effectiveness Questions

1. Introduction

Listed below are a number of questions relevant to the process of performing the cost/benefit calculation that are not easily categorized above; yet, they may have a clear impact on our determination of an energy efficiency program's cost-effectiveness.

2. Questions

34. How should multiple year benefits and costs be brought to a present value? What discount rate or rates should be used? Should this discount rate differ depending on the type of entity implementing the energy efficiency program?

35. What is the appropriate duration for the benefits and costs accrued by each energy efficiency program? Should benefits be estimated over the lives of the measures and future installations, or should a terminal value be utilized as a proxy for continuing costs and benefits after some point in the future? If a terminal value is used, how should such a point and such a proxy be determined?

F. Interaction of the Department's and the DOER's Review Processes

1. Introduction

In addition to issues associated with cost-effectiveness, as outlined above, the Department also intends to determine, in this proceeding, how our processes to evaluate and approve energy

efficiency programs will interact with those of the DOER. Accordingly, the question below seeks comment on the relative roles for the Department and the DOER pursuant to the Restructuring Act.

2. Question

36. Given the DOER's and the Department's responsibilities under the Restructuring Act, how should our processes interact?

V. ORDER

Accordingly, the Department hereby

VOTES: To open an inquiry in order to establish methods and procedures to evaluate and approve energy efficiency programs; and it is

ORDERED: That within seven days of the date of this Order, the Secretary of the Department shall publish the accompanying Notice of Inquiry/Generic Proceeding in all statewide and regional newspapers of daily circulation within the Commonwealth; and it is

FURTHER ORDERED: That the Secretary of the Department shall serve a copy of this Order on the electric distribution companies and natural gas local distribution companies by mail; and it is

FURTHER ORDERED: That the Secretary of the Department shall serve the accompanying Notice of Inquiry/Generic Proceeding on the electric distribution companies and natural gas local distribution companies by fax; and it is

FURTHER ORDERED: That Secretary of the Department shall serve a copy of this Order on all persons that have asked to be placed on a general notification list pursuant to 220 C.M.R. § 2.09 by mail; and it is

FURTHER ORDERED: That within seven days of the date of this Order, the Secretary of the Department shall make available a copy of this document on our Internet website, http://www.magnet.state.ma.us/dpu/.

By Order of the Department,

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Janet Gail Besser, Chair

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James Connelly, Commissioner

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W. Robert Keating, Commissioner

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Paul B. Vasington, Commissioner

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Eugene J. Sullivan, Jr., Commissioner

ATTACHMENT I

Table I: Comparison of the Benefit/Cost Tests

BENEFITS	Utility Cost	Total Resource Cost	Societal
Avoided Costs:			
Generation/Commodity	X	X	X
Transmission	X	X	X
Distribution	X	X	X
Other Resource Benefits		other fuels, only	X
Other Non-Resource Benefits			X
COSTS			
Direct Program Costs			
Measure rebates	X	X	X
Administrative	X	X	X
Monitoring & Evaluation	X	X	X
Customer Costs		X	X
Shareholder Performance Incentives	X	X	X

ATTACHMENT II

NOTICE OF INQUIRY/GENERIC PROCEEDING

D.T.E. 98-100 January 8, 1999

Investigation by the Department of Telecommunications and Energy on its own motion to Establish Methods and Procedures to Evaluate and Approve Energy Efficiency Programs Pursuant to G.L. c. 25, § 19, and c. 25A, § 11G.

On January 8, 1999, the Department of Telecommunications and Energy ("Department") issued an Order instituting a Notice of Inquiry/Generic Proceeding to Establish Methods and Procedures to Ensure that Energy Efficiency Programs are Cost-Effective. In this inquiry, the Department intends to establish a uniform cost-effectiveness test and set of administrative procedures that the Department will employ to evaluate and approve a proposed energy efficiency program, pursuant to G.L. c. 25, § 19 and G.L. c. 25A, § 11G. The Department defines energy efficiency as the implementation of an action, policy, or measure which entails the application of the least amount of energy required to produce a desired or given output and includes demand-side management and energy conservation services. 220 C.M.R. § 11.02.

Specifically, the Department intends to address four broad issues during the pendency of this investigation:

(1) The process by which the Department will review energy efficiency programs

pursuant to G.L. c. 25, § 19, and c. 25A, § 11G;

(2) The criteria the Department will employ to determine whether a proposed energy efficiency program is cost-effective;

(3) The monitoring and evaluation of savings that result from implementation of energy efficiency programs in order to determine program cost-effectiveness; and

(4) The shareholder incentives that are included in energy efficiency plans.

A copy of the Order instituting this investigation will be mailed to all electric distribution companies, all gas distribution companies, and to all persons that have asked to be placed on a general notification list pursuant to 220 C.M.R. § 2.09. In addition, a copy of the Order will be available at the Department's offices located at 100 Cambridge Street, 12th Floor, Boston, Massachusetts 02202 for public inspection during business hours and will be posted on our website, http://www.magnet.state.ma.us/dpu/.

The Department intends that the policies, methods and procedures developed in this proceeding will be utilized to review and approve all energy efficiency programs funded by either a systems benefit charge on the sales of kilowatt-hours of electricity, or by monies collected by the gas local distribution companies for energy efficiency programs. While an entity seeking the Department's approval of a proposed energy efficiency plan will not be precluded from requesting that an alternate policy, method or procedure be utilized by the Department due to entity-specific circumstances, the burden will be on that entity to demonstrate the compelling nature of such a request.

The Department adopts the following procedure. A procedural conference will be held on **January 26, 1999** at the offices of the Department, 100 Cambridge Street, 12th Floor, Boston, Massachusetts. Immediately following that procedural conference, there will be a technical session to discuss the issues and questions relevant to electric distribution companies as outlined in the Order opening this investigation. A second technical session addressing the issues and questions relevant to gas distribution companies will be held on **January 28, 1999** also at the offices of the Department. Additional proceedings may be scheduled during the initial procedural conference and technical sessions.

The Department will accept written comments on the issues and questions identified in the Order and technical sessions up to **March 12, 1999**. The Department encourages the filing of joint comments and will give them due consideration in the development of our guidelines. Based on input from these sessions and from the comments, the Department intends to publish for comment draft guidelines regarding the methods and procedures we will employ to evaluate and approve a proposed energy efficiency program.

Whenever possible comments should clearly indicate to which issue(s) and question(s) they are responsive. All comments exceeding twenty pages in length must be accompanied by an executive summary. Comments may not exceed 50 pages in length. Commenters must, whenever possible, file comments on a 3.5" floppy diskette, IBM-compatible format. The file format for all responses shall be compatible with either Word Perfect 6.0, for textual responses, or with Microsoft Excel 5.0 for data/spreadsheet responses. One original and eleven (11) copies of all comments should be filed with **Mary L. Cottrell, Secretary, Department of Telecommunications and Energy, 100 Cambridge Street, Boston, Massachusetts 02202**. A copy of the comments will be available for public inspection and/or purchase at the Department's offices during business hours. In addition, all comments submitted on computer diskette will be posted on the Department's website at http://www.magnet.state.ma.us/dpu/.

Any person desiring further information regarding this Notice of Inquiry/Generic Proceeding should contact:

A. Quincy Vale, Hearing Officer

Department of Telecommunications and Energy

100 Cambridge Street, Room 1210

Boston, MA 02202

(617) 305-3500

By Order of the Department,

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Mary L. Cottrell, Secretary

1. This Order requires the Secretary of the Department of Telecommunications and Energy to publish the legal notice provided in Attachment II in all statewide and regional newspapers of daily circulation within the Commonwealth, and to disseminate a copy of this Order to all persons that have asked to be placed on a general notification list pursuant to 220 C.M.R. § 2.09.

2. The Department defines energy efficiency as the implementation of an action, policy, or measure which entails the application of the least amount of energy required to produce a desired or given output and includes demand-side management and energy conservation services. 220 C.M.R. § 11.02; see also, G.L. c. 164, § 1, cl. 19.

3. Added by Section 37 of Chapter 164 of the Acts of 1997, entitled "An Act Relative to Restructuring the Electric Utility Industry in the Commonwealth, Regulating the Provision of Electricity and Other Services, and Promoting Enhanced Consumer Protection Therein" ("Restructuring Act" or "Act").

4. As provided by the Act, this mandatory charge shall be: 3.3 mills ($0.0033) per kilowatt-hour for calendar year 1998; 3.1 mills ($0.0031) per kilowatt-hour for calendar year 1999; 2.85 mills ($0.00285) per kilowatt-hour for calendar year 2000; 2.7 mills ($0.0027) per kilowatt-hour for calendar year 2001; and 2.5 mills ($0.0025) per kilowatt-hour for calendar year 2002. G.L. c. 25, § 19. Furthermore, "[a] distribution company shall not be allowed to assess any other charge relative to energy efficiency programs which would exceed the levels permitted herein." Id. In order for funding to continue beyond 2002, the Division of Energy Resources must make a determination that the continued operation of the programs delivers cost-effective, energy efficiency services, and then file legislation with the General Court to extend the mandatory charge for a time certain. Id. In any event, a charge of 0.25 mills ($0.00025) per kilowatt-hour for comprehensive low-income residential demand-side management and education programs is continued without any additional determinations or legislation. Id.

5. The Department notes that Chapter 164 of the Acts of 1997 (the Restructuring Act) enables additional entities, such as municipal aggregators, to implement energy efficiency programs. St.1997, c. 164, § 247, sec. 134(b) (codified at G.L. c. 164, § 134(b)). Although no such programs have been certified by the Department to date, we intend the policies and procedures developed in this proceeding to apply to all implementors of energy efficiency programs funded by either a systems benefit charge on sales of kilowatt-hours of electricity or by monies collected by the gas local distribution

companies for energy efficiency programs. While entities seeking the Department's approval of a proposed energy efficiency plan will not be precluded from requesting that an alternative policy, method or procedure be utilized by the Department due to entity-specific circumstances, the burden will be on that entity to demonstrate the compelling nature of such a request.

6. G.L. c. 25A, § 11G states, among other things, that the DOER "shall have the authority to oversee and coordinate ratepayer-funded energy efficiency programs." As stated above, G.L. c. 25, § 19 requires the Department ensure that the programs are delivered in a cost-effective manner

7. Investigation of the role of the DOER in the oversight and coordination of energy efficiency programs, pursuant to G.L. c. 25A, § 11G, commenced November 17, 1998.

8. See Section IV.5, below, for a discussion of these "other benefits."

9. The 1998 and 1999 energy efficiency programs included in the Department-approved settlements used an avoided generation cost developed by a working group convened by the DOER. Based on six market-based marginal cost projections, the working group calculated avoided generation costs escalating from $40.10 per megawatt-hour in 1998. Memorandum from Francis H. Cummings & Julie E. Michals, DOER, to Participants of the Electric Utility Energy Efficiency Technical Forum 1 (June 25, 1997). The working group recommended that these values be revised on a state-wide basis after the first two years of implementing each electric company's five-year plan. Id. at 1-2.

10. See Tellus Institute, Non-Price Factors of Boston Edison's Demand-Side Management Programs: A Review of the Societal Benefits of Energy Efficiency, vol. 1 at 23-24 (Aug. 3, 1995) (citing Department of Energy, National Impacts of the Weatherization Assistance Program in Single-Family and Small Multi-Family Dwellings (Oak Ridge Study 1993)).

11. Fitchburg Gas and Electric Light Company, D.T.E. 98-48/49 (ongoing); Eastern Edison Company, D.P.U./D.T.E. 97-91 (Sept. 14, 1998); Cambridge Electric Light Company/Commonwealth Electric Company, D.T.E. 98-16 (July 31, 1998); Boston Edison Company, D.T.E. 97-86 (Feb. 27, 1998); Massachusetts Electric Company/Nantucket Electric Company, D.T.E. 97-77 (Feb. 26, 1998); Western Massachusetts Electric Company, D.T.E. 97-106/120 (Feb. 20, 1998).